

SAFETY CABLES WITH CIRCUIT INTEGRITY

(N)HXCH FE180/ E90 (K054)

SiR/FRNC halogen-free energy cable with
insulation integrity and circuit integrity,
screened
VDE Reg. No. K054



TECHNICAL DATA



Standard

adapted to DIN VDE 0266
with reference to:
DIN VDE 0276-604, part 0, 1 and 5G
HD 604 5H
DIN VDE 0276-627, part 1 and 7H



Certificate

VDE Germany
VDE Reg. No. K054



Test Voltage

core/core 4 kV / 50 Hz



Rated Voltage

0.6/1 kV



Bending radius (min.)

12 x Ø of cable



Fire properties

EN 60332-1-2: flame retardant
EN 60754-2: halogen-free, non-corrosive
combustion gases
EN IEC 60332-3-24: reduced flame
propagation



Core identification

EN 61034-2: low smoke emission
DIN VDE 0472-814: insulation integrity FE180
DIN 4102-12: circuit integrity E90



Temperature range

Laying temperature: min. -5°C
Operating temperature: -30°C up to 90°C
Conductor temperature: max. 90°C
Short circuit temperature: max. 250°C

DESIGN



Copper conductor, round solid (RE)



Core insulation (silicone rubber)



Inner covering (halogen-free tape and halogen free
polymer compound)



Inner sheath (halogen-free polymer compound)



Concentric screen (bare copper wires applied with
changing direction of lay) and counter helix (copper tape)



Sheath (halogen-free polymer compound, orange)

PARAMETERS

Number of cores x nominal cross-section / cross-section of screen (mm ²)	Max. conductor resistance (Ω/km)	Current rating in the air (A)	Outer diameter appr. (mm)	Total weight appr. (kg/km)
2 x 1.5 RE / 1.5	12.1	29	10.8	159
3 x 1.5 RE / 1.5	12.1	24	11.2	178
4 x 1.5 RE / 1.5	12.1	24	12.1	209
5 x 1.5 RE / 1.5	12.1	24	12.9	236
7 x 1.5 RE / 2.5	12.1	16	13.9	299
10 x 1.5 RE / 2.5	12.1	13	17.0	421
12 x 1.5 RE / 2.5	12.1	13	17.4	458
19 x 1.5 RE / 2.5	12.1	11	19.8	626
24 x 1.5 RE / 6	12.1	10	23.7	857
30 x 1.5 RE / 6	12.1	8	24.8	975
40 x 1.5 RE / 10	12.1	8	28.1	1262
52 x 1.5 RE / 10	12.1	8	31.2	1563
61 x 1.5 RE / 10	12.1	7	33.2	1789
2 x 2.5 RE / 2.5	7.41	38	12.1	215
3 x 2.5 RE / 2.5	7.41	32	12.6	244
4 x 2.5 RE / 2.5	7.41	32	13.6	287
5 x 2.5 RE / 2.5	7.41	32	14.5	328
7 x 2.5 RE / 2.5	7.41	21	15.7	405
10 x 2.5 RE / 4	7.41	18	19.9	593
12 x 2.5 RE / 4	7.41	17	20.6	660
19 x 2.5 RE / 4	7.41	14	23.7	927
24 x 2.5 RE / 10	7.41	13	27.7	1236
30 x 2.5 RE / 10	7.41	10	29.2	1430
40 x 2.5 RE / 10	7.41	10	32.5	1804
52 x 2.5 RE / 10	7.41	10	36.4	2270
61 x 2.5 RE / 10	7.41	9	38.3	2565
2 x 4 RE / 4	4.61	51	14.0	289
3 x 4 RE / 4	4.61	42	14.6	331
4 x 4 RE / 4	4.61	42	15.8	391
5 x 4 RE / 4	4.61	42	17.0	456
2 x 6 RE / 6	3.08	64	15.6	385
3 x 6 RE / 6	3.08	53	16.2	445
4 x 6 RE / 6	3.08	53	17.5	528
5 x 6 RE / 6	3.08	53	19.0	617
2 x 10 RE / 10	1.83	86	18.8	583
3 x 10 RE / 10	1.83	74	19.6	683
4 x 10 RE / 10	1.83	74	21.2	813
5 x 10 RE / 10	1.83	74	23.0	960



System / System Manufacturer	System identification	Classification	Range	Distance (a) /Width (b) / Load (g)	AbP number	Laying type No.
OBO Bettermann	RKSM 630 + AW55/31	E90	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 300 mm g ≤ 20 kg/m	P-MPA-E-23-003	2.1
OBO Bettermann	2056/M	E90	n x ≥ 1.5/1.5	a ≤ 800 mm	P-MPA-E-23-003	8.1
Niedax	SHS15	E90	n x = 1.5/1.5	a ≤ 600 mm g ≤ 3 kg/m	P-MPA-E-23-003	7.1
Niedax	Bügeschellen B	E90	n x ≥ 1.5/1.5	a ≤ 800 mm	P-MPA-E-23-003	9.1
Niedax	Abstandschelle SAS	E90	n x ≥ 1.5/1.5	a ≤ 800 mm	P-MPA-E-23-003	9.2

CONTACT PERSON

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